TECHNICAL INFORMATION AND SERVICE DATA

AWA RADIOLA

MODEL 524-M

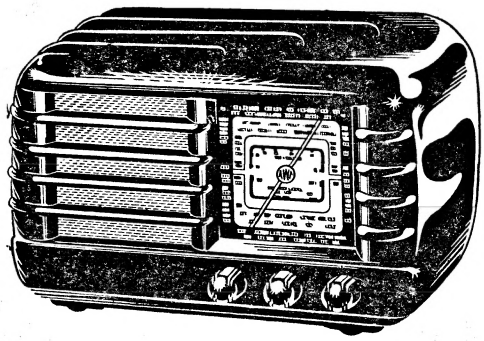
FIVE VALVE, BROADCAST, A.C. OPERATED SUPERHETERODYNE

AND

MODEL 525-M

FIVE VALVE, TWO BAND, A.C. OPERATED SUPERHETERODYNE

ISSUED BY
AMALGAMATED WIRELESS (A/SIA) LTD.



ELECTRICAL SPECIFICATIONS.

FREQUENCY RANGE: **Model 524-M** ..... 540-1600 Kc/s (555-187.5M)

Model 525-M ..... 540-1600 Kc/s (555-187.5M) 6-18 Mc/s (50-16M)

INTERMEDIATE FREQUENCY ..... 455 Kc/s

POWER SUPPLY RATING ..... 200-260 volts, 50-60 C.P.S.
(Models are produced with other voltage and frequency ratings.)

POWER CONSUMPTION ..... 60 watts

VALVE COMPLEMENT

Model 524-M	(1)	6A8G	Converter
	(2)	6SK7GT	I.F. Amplifier
	(3)	6SQ7GT	Det., A.V.C. A.F. Amp.
	(4)	6V6GT/G	Output
	(5)	6X5GT	Rectifier
Model 525-M	(1)	6J8GA	Converter
	(2)	6SK7GT	I.F. Amplifier
	(3)	6SQ7GT	Det., A.V.C. A.F. Amp.
	(4)	6V6GT/G	Output
	(5)	6X5GT	Rectifier

LOUDSPEAKER:
5 inch—Code No. AA16
Transformer XA2
V.C. Impedance—3 ohms at 400 C.P.S.
Field—1000 ohms.

UNDISTORTED POWER OUTPUT: 3 watts

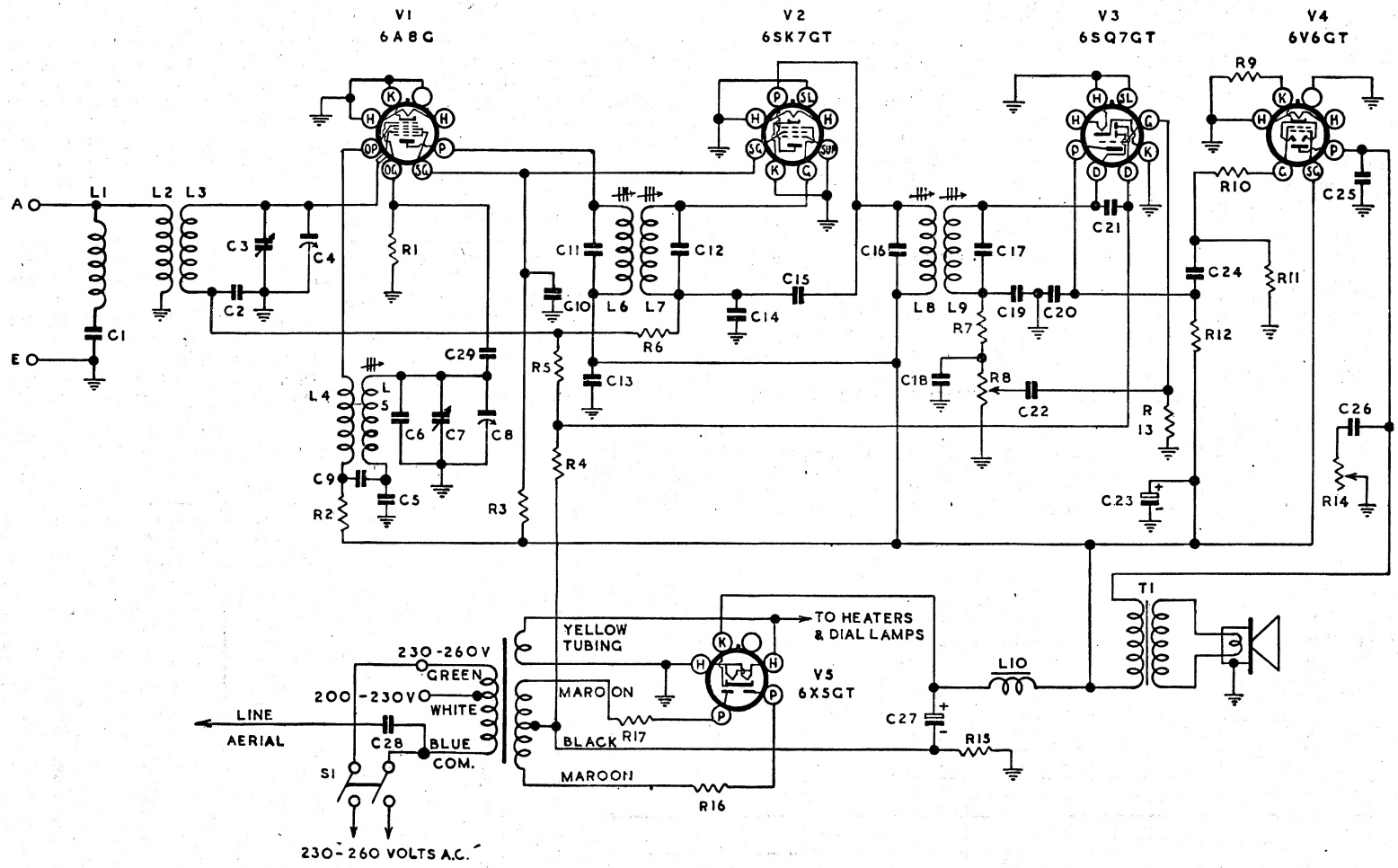
GENERAL DESCRIPTION.

The models 524-M and 525-M are mantel models housed in attractively designed moulded cabinets, which are produced in three colours: Ivory, Walnut and Burgundy.

Features of design include: Tropic-proof construction, automatic volume control, magnetite cores in I.F. transformers and broadcast oscillator coils, air-dielectric trimming capacitors.

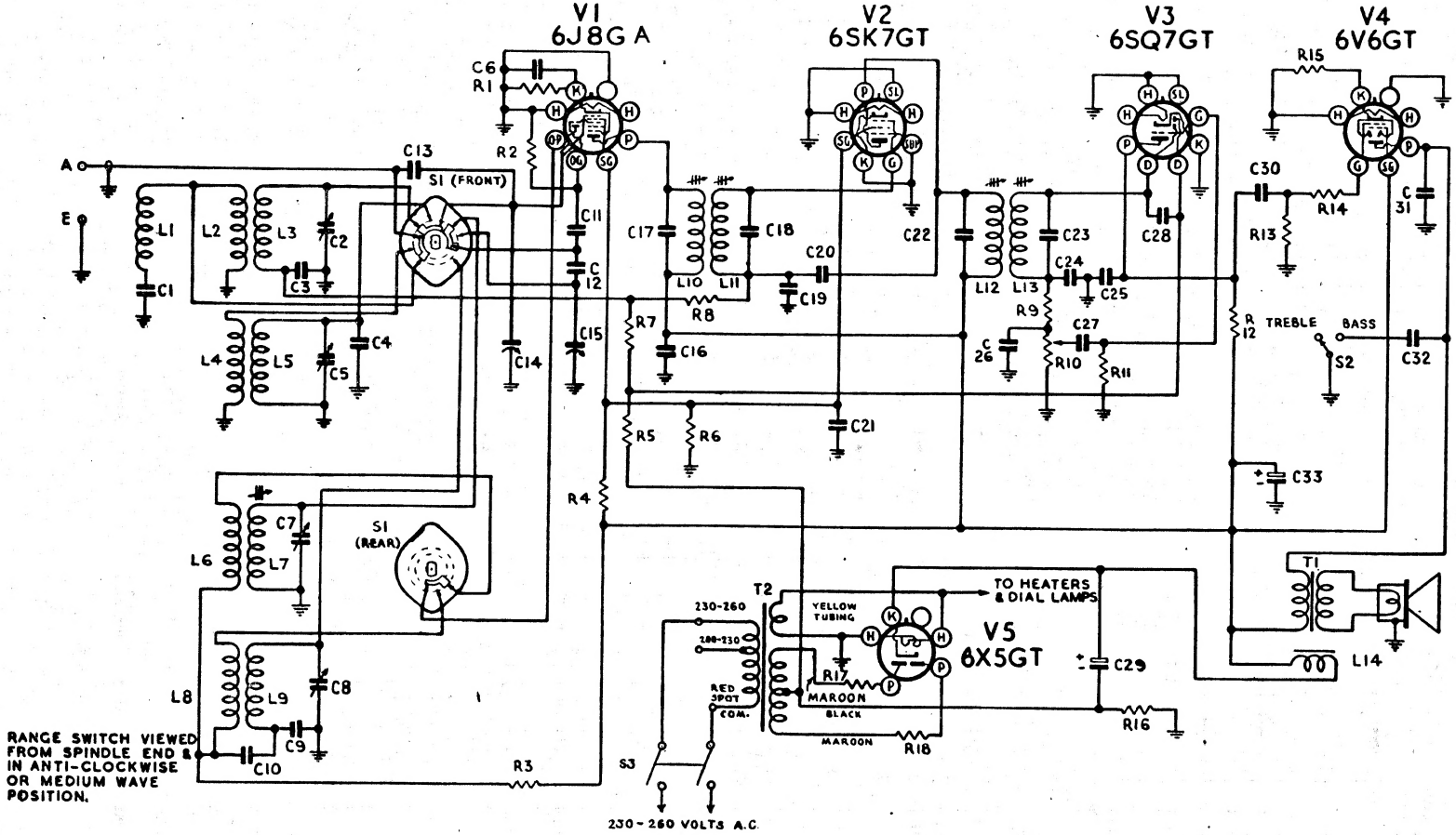
Electrically, model 524-M closely resembles the models 512-M/519-M, differences being in the addition of a power switch on the volume control (R8) and a capacity to mains aerial. (See circuit diagram and code.) For all other information, refer to the 512-M/519-M Service Manual.

Model 525-M is the same as model 518-M, except that the power switch is situated on the volume control (R10). Refer to the model 510-M Service Manual for all other information.



CIRCUIT CODE — RADIOLA 524-M.

Code No.	Description	Part No.
	INDUCTORS	
L1	I.F. Filter (including C1)	9382
L2, L3	Aerial Coil, 540-1600 Kc/s.	15454
L4, L5	Oscillator Coil, 540-1600 Kc/s	7638A
L6, L7	1st I.F. Transformer	22700
L8, L9	2nd I.F. Transformer	22703
L10	Speaker Field, 1000 ohms	
	RESISTORS	
R1	50,000 ohms, ½ watt	
R2	20,000 ohms, 1 watt	
R3	25,000 ohms, 2 watt	
R4	2.5 megohms, ½ watt	
R5	1.6 megohms, ½ watt	
R6	0.1 megohm, ½ watt	
R7	50,000 ohms, ½ watt	
R8	0.5 megohm—Volume Control (including S1)	23480
R9	325 ohms, 3 watt	
R10	50,000 ohms, ½ watt	
R11	0.5 megohm, ½ watt	
R12	0.25 megohm, 1 watt	
R13	10 megohms, 1 watt	
R14	0.1 megohm—Tone Control	21917
R15	50 ohms, 3 watt	
R16	100 ohms, ½ watt	
R17	100 ohms, ½ watt	
	CAPACITORS	
C1	50 uuF Silvered Mica	
C2	.05 uF Paper, 200 v. working	
C3	3-25 uuF Air Trimmer	19659
C4	12-430 uuF Tuning	18201
C5	420 uuF Mica ± 2½% padder	
C6	9 uuF Mica	
C7	3-25 uuF Air Trimmer	19659
C8	12-430 uuF Tuning	18201
C9	.05 uF Paper, 400 v. working	
C10	0.1 uF Paper, 400 v. working	
C11	70 uuF Mica	
C12	70 uuF Mica	
C13	0.1 uF Paper, 400 v. working	
C14	.05 uF Paper, 200 v. working	
C15	9 uuF Mica	
C16	70 uuF Mica	
C17	70 uuF Mica	
C18	100 uuF Mica	
C19	100 uuF Mica	
C20	200 uuF Mica	
C21	50 uuF Mica	
C22	.01 uF Paper, 600 v. working	
C23	16 uF 525 P.V. Electrolytic	
C24	.02 uF Paper, 600 v. working	
C25	.01 uF Paper, 600 v. working	
C26	.03 uF Paper, 600 v. working	
C27	8 uF 525 P.V. Electrolytic	
C28	500X uuF Mica (2000 v. test)	
C29	70 uuF Mica	
	TRANSFORMERS	
T1	Loudspeaker Transformer	XA2
T2	Power Transformer 50-60 C.P.S.	17859A
T2	Power Transformer, 40 C.P.S.	17861A
	SWITCH	
S1	Power Switch (on R8)	
	LOUDSPEAKER	
	5 inch Electro Magnet	AA16



CIRCUIT CODE — MODEL 525-M.

Code No.	Description	Part No.
	INDUCTORS	
L1	I.F. Filter (including C1)	9382
L2, L3	Aerial Coil, 540-1600 Kc/s	15454
L4, L5	Aerial Coil, 6-18 Mc/s	15456
L6, L7	Oscillator Coil, 540-1600 Kc/s	9206A
L8, L9	Oscillator Coil, 6-18 Mc/s	15458
L10, L11	1st I.F. Transformer	22700
L12, L13	2nd I.F. Transformer	22703
L14	Speaker Field, 1000 ohms	
	RESISTORS	
R1	200 ohms, ½ watt	
R2	32,000 ohms, ½ watt	
R3	25,000 ohms, 1 watt	
R4	25,000 ohms, 2 watt	
R5	2.5 megohms, ½ watt	
R6	20,000 ohms, 1 watt	
R7	1.6 megohms, ½ watt	
R8	0.1 megohm, ½ watt	
R9	50,000 ohms, ½ watt	
R10	0.5 megohm—Volume Control (including S3)	23480
R11	10 megohms, 1 watt	
R12	0.25 megohm, 1 watt	
R13	0.5 megohm, ½ watt	
R14	50,000 ohms, ½ watt	
R15	325 ohms, 3 watt	
R16	50 ohms, 3 watt	
R17	100 ohms, ½ watt	
R18	100 ohms, ½ watt	
	CAPACITORS	
C1	50 uuF Silvered Mica	
C2	3-25 uuF Air Trimmer	19659
C3	.05 uF Paper, 200 v. working	
C4	9 uuF Mica	
C5	3-25 uuF Air Trimmer	19659
C6	0.1 uF Paper, 200 v. working	
C7	3-25 uuF Air Trimmer	19659
C8	3-25 uuF Air Trimmer	19659
C9	4000 uuF Mica Padder	
C10	.05 uF Paper, 400 v. working	
C11	70 uuF Mica	
C12	470 uuF Mica Padder	
C13	4 uuF Mica	
C14	12-430 uuF Tuning	18201
C15	12-430 uuF Tuning	18201
C16	.1 uF Paper, 400 v. working	
C17	70 uuF Mica	
C18	70 uuF Mica	
C19	.05 uF Paper, 200 v. working	
C20	9 uuF Mica	
C21	.1 uF Paper, 400 v. working	
C22	70 uuF Mica	
C23	70 uuF Mica	
C24	100 uuF Mica	
C25	200 uuF Mica	
C26	100 uuF Mica	
C27	.01 uF Paper, 600 v. working	
C28	50 uuF Mica	
C29	8 uF 525 P.V. Electrolytic	
C30	.02 uF Paper, 600 v. working	
C31	0.01 uF Paper, 600 v. working	
C32	.03 uF Paper, 600 v. working	
C33	16 uF 525 P.V. Electrolytic	
	TRANSFORMERS	
T1	Loudspeaker Transformer	XA2
T2	Power Transformer, 50-60 C.P.S.	17859B
T2	Power Transformer, 40 C.P.S.	17861B
	LOUDSPEAKER	
	5 inch Electro Magnet	AA16
	SWITCHES	
S1	Range Switch	20156
S2	Tone Switch	22775
S3	Power Switch (on R10)	

SOCKET VOLTAGES — MODEL 524-M.

Valve	Cathode to Chassis Volts	Screen Grid to Chassis Volts	Anode to Chassis Volts	Anode Current mA	Heater Volts
6A8G Converter	0	90	240	5.0	6.3
Oscillator	—	—	170	3.5	—
6SK7GT I.F. Amp.	0	90	240	8.0	6.3
6SQ7GT Det., A.V.C. A.F. Amp.	0	—	90*	0.6	6.3
6V6GT/G Output	13	240	225	35.0	6.3
6X5GT Rectifier	300	—	280 (A.C.)	—	6.3

Total H.T. Current—60 mA.
Volts across back-bias resistor R15—3.0
Measured at 240 volts A.C. supply. No signal input.
Volume/Power Control maximum clockwise. Voltmeter 1000 ohms per volt; measurements taken on highest scale giving accurate readable deflection.

*This reading may vary depending on the resistance of the voltmeter used.

SOCKET VOLTAGES — MODEL 525-M.

Valve	Cathode to Chassis Volts	Screen Grid to Chassis Volts	Anode to Chassis Volts	Anode Current mA	Heater Volts
6J8GA Converter M.W.	1.5	80	240	1.0	6.3
S.W.	2.0	80	240	1.3	—
Oscillator M.W.	—	—	115	5.0	—
S.W.	—	—	115	5.0	—
6SK7GT I.F. Amp.	0	80	240	6.0	6.3
6SQ7GT Det., A.V.C. A.F. Amp.	0	—	90*	0.6	6.3
6V6GT/G Output	13	240	225	35.0	6.3
6X5GT Rectifier	300	—	280 (A.C.)	—	6.3

Volts across back-bias resistor R16—3.0
Total H.T. Current—60 mA.
Measured at 240 volts A.C. supply. No signal input.
Volume/Power Control maximum clockwise. Voltmeter 1000 ohms per volt; measurements taken on highest scale giving accurate readable deflection.

*This reading may vary depending on the resistance of the voltmeter used.